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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,928	05/23/2001	Lin Wang	211534	1613

23460 7590 12/24/2003

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EXAMINER

FONTAINE, MONICA A

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,928

Applicant(s)

WANG ET AL.

Examiner

Monica A Fontaine

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 8-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 33-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claims 8-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected starch product, process for preparing a solution, and process for preparing a film, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.

Priority

Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Altieri et al. (U.S. Patent 5,849,233). Regarding Claim 1, Altieri et al., hereafter "Altieri," show that it is known to carry out a process for preparing a cold-water soluble extruded starch product (Abstract), the process comprising providing a hydroxyalkyl starch, said starch being derivatized with a hydroxyalkyl substituent having from 2 to 6 carbon atoms (Column 3, lines 51-58), and extruding said starch in an extruder (Column 4, lines 43-44), said extruder having a barrel, a die,

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and at least one rotating shaft (Column 4, lines 56-63), said barrel having at least first and second zones, said first zone being upstream from said second zone, the temperature in said first zone being insufficient to gelatinize said starch and the temperature in said second zone being sufficient to gelatinize said starch (Column 4, lines 48-55; Column 5, lines 4-11; Column 6, lines 39-44), said starch being extruded in the presence of total moisture in said barrel no greater than about 25% by weight of said starch (Column 4, lines 43-46), said process including the step of controlling the rotational speed of said shaft to impart a specific mechanical energy to said starch sufficient to result in a soluble extruded starch product that is capable of extrusion through said die at said rotational speed (Column 6, lines 39-40).

Regarding Claims 2-4, Altieri shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the moisture in said barrel does not exceed (Claim 2) 22.5% by weight of said starch (Column 2, lines 10-13), (Claim 3) 20% by weight of said starch (Column 2, lines 10-13), and (Claim 4) 17.5% by weight of said starch (Column 2, lines 10-13).

Regarding Claim 5, Altieri shows the process as claimed as discussed in the rejection of Claim 1 above, including a method further comprising the step of drying said extruded starch product to a moisture content below about 15% to form a dried product (Column 5, lines 39-42).

Regarding Claim 6, Altieri shows the process as claimed as discussed in the rejection of Claims 1 and 5 above, including a method wherein said starch product is dried to a moisture content between about 9% and about 12 % (Column 5, lines 39-42).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Altieri, in view of Dudacek et al. (U.S. Patent 6,001,408).

Regarding Claim 7, Altieri shows the process as claimed as discussed in the rejection of Claims 1 and 5-6, but he does not show the further step of grinding. Dudacek et al., hereafter "Dudacek," shows that it is known to carry out a method of extruding a starch product comprising the step of grinding said dried product (Column 2, lines 45-50; Column 3, lines 41-45). Dudacek and Altieri are combinable because they are concerned with a similar technical field, namely, that of extruding starch compounds. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to follow Dudacek's grinding process after Altieri's extrusion and drying process in order to further minimize the size of the molded particles.

Regarding Claim 33, Altieri shows that it is known to carry out a process for preparing an extruded starch product comprising providing a hydroxyalkyl starch, said starch being derivatized with a hydroxyalkyl substituent having from 2 to 6 carbon atoms (Column 3, lines 51-58), and extruding said starch in an extruder (Column 4, lines 43-44), said extruder having a barrel, a die, and at least one rotating shaft (Column 4, lines 56-63), said barrel having at least

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first and second zones, said first zone being upstream from said second zone, the temperature in said first zone being insufficient to gelatinize said starch and the temperature in said second zone being sufficient to gelatinize said starch (Column 4, lines 48-55; Column 5, lines 4-11; Column 6, lines 39-44), said starch being extruded in the presence of total moisture in said barrel no greater than about 25% by weight of said starch (Column 4, lines 43-46), said process including the step of controlling the rotational speed of said shaft to impart a specific mechanical energy to said starch sufficient to result in a soluble extruded starch product that is capable of extrusion through said die at said rotational speed (Column 6, lines 39-40). Altieri does not show applying his extruded starch product to a food substrate. Dudacek shows that it is known to produce a coated food product comprising providing a food substrate (Column 2, lines 59-61), providing a seasoning adherence solution (Column 1, lines 24-36; Column 2, lines 59-67), and applying said seasoning adherence to said food product in a manner effective to cause seasoning in said solution to adhere to said food substrate; said seasoning adherence solution having been prepared by mixing water, an extruded starch product, and a seasoning to form said solution (Column 1, lines 24-36; Column 2, lines 59-67; Column 7, lines 7-33; Column 11, lines 64-67; Column 12, lines 1-26). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Altieri's extruded starch product as a solution applicable to Dudacek's food substrates in order to impart an artificial or desired flavor to an ordinarily flavorless piece of food.

Regarding Claims 34-36, Altieri shows the process as claimed as discussed in the rejection of Claim 33 above, including a method wherein the moisture in said barrel does not exceed (Claim 34) 22.5% by weight of said starch (Column 2, lines 10-13), (Claim 35) 20% by

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weight of said starch (Column 2, lines 10-13), and (Claim 36) 17.5% by weight of said starch (Column 2, lines 10-13).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A Fontaine whose telephone number is 703-305-7239. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianni can be reached on 703-305-5493. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Maf

Maf
December 18, 2003

*new phone number
after 12/22/03
511-272-1198*

Leo B. Tentoni

LEO B. TENTONI
PRIMARY EXAMINER
ART UNIT 10732